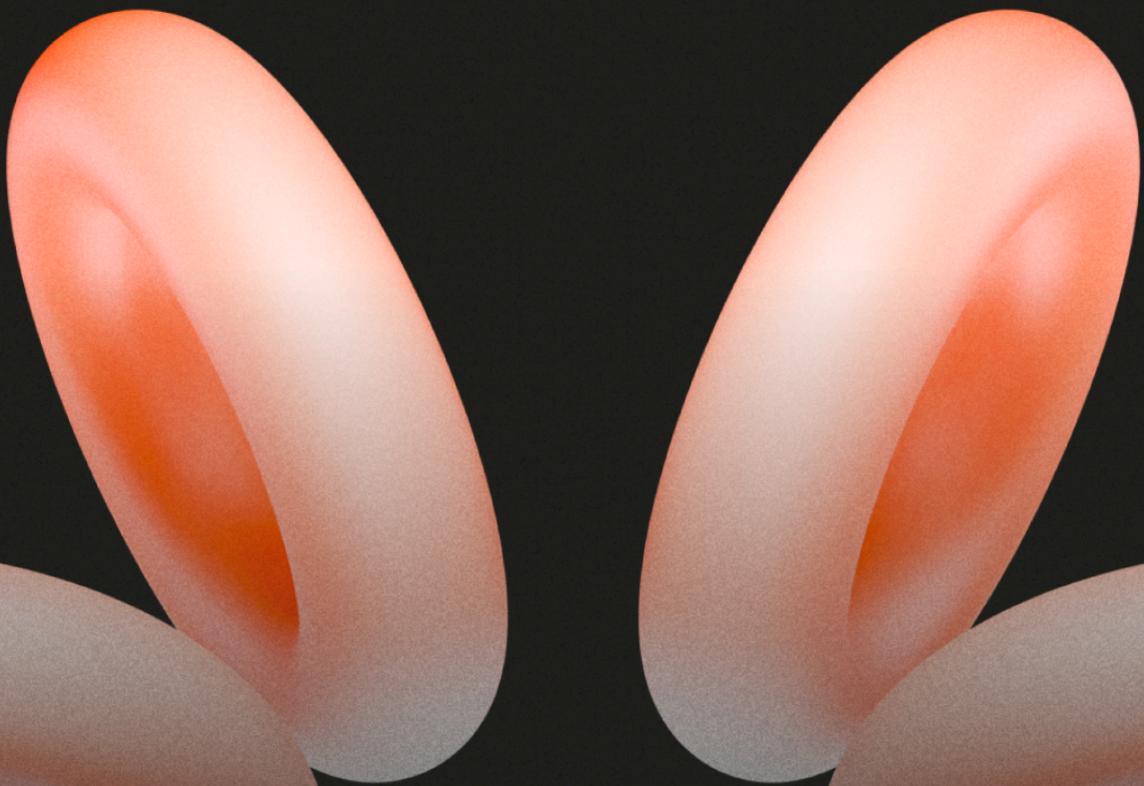




# Gyndore

## Whitepaper



by

 Ayeteasea

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# Gyndore

*Whitepaper — Bringing Bitcoin-Backed Stablecoin Infrastructure on Base*

## Executive Summary

Gyndore is a Bitcoin-backed, CDP-based stablecoin protocol built on Base. Users deposit cbBTC as collateral to mint gynUSD, a synthetic stablecoin pegged to the US dollar, allowing them to access liquidity and yield on Base without selling their Bitcoin.

Base has seen growing cbBTC adoption and rising demand for cbBTC-backed borrowing, yet no cbBTC-native, CDP-based borrowing product exists on the network. Users who want to borrow against their Bitcoin must use general-purpose money markets that spread liquidity across dozens of assets, apply conservative risk parameters designed for volatile long-tail tokens, and offer loan-to-value ratios well below what Bitcoin's liquidity profile can support.

Gyndore fills this gap as a specialized borrowing venue built exclusively for cbBTC. By focusing on a single collateral type, Gyndore concentrates liquidity around one core market, simplifies risk, and delivers higher capital efficiency. A 110% minimum collateralization ratio enables borrowing up to 90.91% of collateral value.

The entire platform is optimized around one collateral type and one borrowing flow, resulting in a simpler product experience than multi-asset alternatives. Each collateralized debt position (CDP) is represented as a transferable NFT, enabling secondary market trading, position transfers, and more flexible onchain leverage management. This expands user optionality and improves composability beyond the protocol itself.

Inspired by design patterns from Liquity and MakerDAO, Gyndore is built around immutable core parameters to maximize trust minimization and reduce governance risk. The protocol is non-upgradable. The only post-deploy changes are borrow rate adjustments, controlled through the Pareto Controller — a minimalist, rules-based voting mechanism designed to limit governance capture and minimize parameter abuse. GYND is the protocol's sole utility token, granting holders governance rights over borrow rate adjustments and a share of protocol revenue. GYND holders vote only on rate direction (UP or DOWN), not arbitrary parameter changes.

Any adjustment is tightly constrained to  $\pm 10$  basis point steps, with the borrow rate bound between 1% and 20%. For a change to pass, it must meet a high bar of at least 80% consensus and at least 1% participation, followed by a 24-hour challenge window before execution.

This design gives GYND holders meaningful control over borrowing costs while strictly limiting governance scope, reducing the risk of parameter abuse, and preserving the protocol's trust-minimized design. Beyond borrow rate updates, Gyndore has no ongoing admin controls.

The protocol supports two launch configurations depending on market conditions at the time of deployment. In a bootstrapping launch, a team-held admin key initially manages borrow rate governance and receives the 30% governance and revenue share.

Once sufficient liquidity and growth milestones are reached, a predefined, one-time, irreversible fee switch is executed that permanently disables the admin key, mints the GYND token, and transfers governance and revenue rights to token holders. After this transition, no privileged actions remain.

Alternatively, if sufficient market conditions exist for token distribution and capital formation prior to mainnet deployment, the protocol can launch with the fee switch pre-activated and GYND minted from day one. In this configuration, GYND holders receive governance and revenue rights immediately at launch, the admin key is never active, and the protocol operates as fully immutable infrastructure from its first block.

In short, Gyndore is purpose-built, immutable cbBTC borrowing infrastructure for Base: a specialized, capital-efficient way to unlock Bitcoin liquidity onchain without selling the underlying asset. This structure preserves the core blockchain principles of neutrality, transparency, and censorship resistance, while keeping the system flexible enough to respond to market conditions through a single, tightly scoped lever.

# Introduction

Bitcoin represents over **\$1 trillion** in value, yet the vast majority of it remains idle in wallets, untouched by decentralized finance. Because Bitcoin lacks native programmability, users who want to put their BTC to work have increasingly migrated to smart contract platforms through wrapped assets like cbBTC, wBTC, and other tokenized representations. For most users, wrapped BTC has become the default way to access DeFi, largely replacing native Bitcoin-based alternatives.

More recently, newer decentralized options such as tBTC from Threshold Network have emerged to unlock Bitcoin liquidity while aiming to preserve stronger security guarantees. tBTC relies on threshold cryptography and a decentralized network of independent node operators to reduce reliance on centralized custodians.

However, these approaches still lack the distribution, liquidity depth, and simplicity of wrapped BTC alternatives, which limits adoption. While a segment of the market prefers trust-minimized bridging, broader usage continues to favor wrapped BTC assets on smart contract platforms like Ethereum and Base.

On Base specifically, demand for Bitcoin-backed financial products has grown as users seek yield and liquidity without selling their BTC exposure. Yet existing DeFi borrowing options often come with major inefficiencies. Many protocols require high overcollateralization, which significantly reduces capital efficiency.

Multi-asset lending platforms also tend to apply uniform risk models across many different tokens, leading to conservative loan-to-value ratios that fail to reflect Bitcoin's uniquely deep liquidity and mature market structure, resulting in more costly borrow rates.

Gyndore addresses these gaps through a Bitcoin-only design, using cbBTC as the sole collateral and gynUSD as the minted stablecoin. This single-collateral architecture allows risk parameters to be optimized specifically for Bitcoin's liquidity profile, rather than relying on generalized frameworks built to accommodate less liquid, long-tail assets.

Built on Base, Gyndore benefits from low transaction costs and Coinbase's cbBTC infrastructure. Its core mechanics draw on the proven CDP design patterns of Liquity and MakerDAO, while introducing upgrades such as NFT-based position ownership and the Pareto Controller, a constrained voting mechanism for borrow rate management.

*A core advantage of Gyndore's CDP model is its structural efficiency relative to traditional money markets.*

Traditional lending markets are built around pooled supplier capital. To keep that liquidity available, the system must continuously attract and retain depositors, including during periods of low utilization. In practice, this often creates inefficiency. Borrowers can end up paying rates that reflect not only credit and liquidity risk, but also the cost of maintaining idle or fragmented supply across the market.

Gyndore follows a different model. Users mint gynUSD directly against their own cbBTC collateral, so the protocol does not rely on a large pool of lendable Bitcoin that must be passively compensated at all times. This removes a major source of structural drag and allows borrowing activity to translate more directly into protocol revenue.

That revenue is then distributed through a fixed, immutable fee split, with allocation rights determined by the protocol's launch stage. 70% always flows to Stability Pool depositors who stake gynUSD. The remaining 30% flows either to the bootstrapping admin recipient during the initial launch phase or to GYND stakers after the one time, irreversible fee switch is executed.

Once the fee switch is activated, the admin path is permanently disabled, GYND is minted, and the 30% share is redirected to token holders. From that point onward, the split is hardcoded and cannot be changed, making value accrual predictable, transparent, and credibly neutral.

The result is a more capital efficient system with cleaner market pricing. Borrow rates are shaped primarily by demand for cbBTC backed liquidity and protocol risk conditions, rather than the utilization constraints and supply side overhead typical of traditional multi-asset money markets.

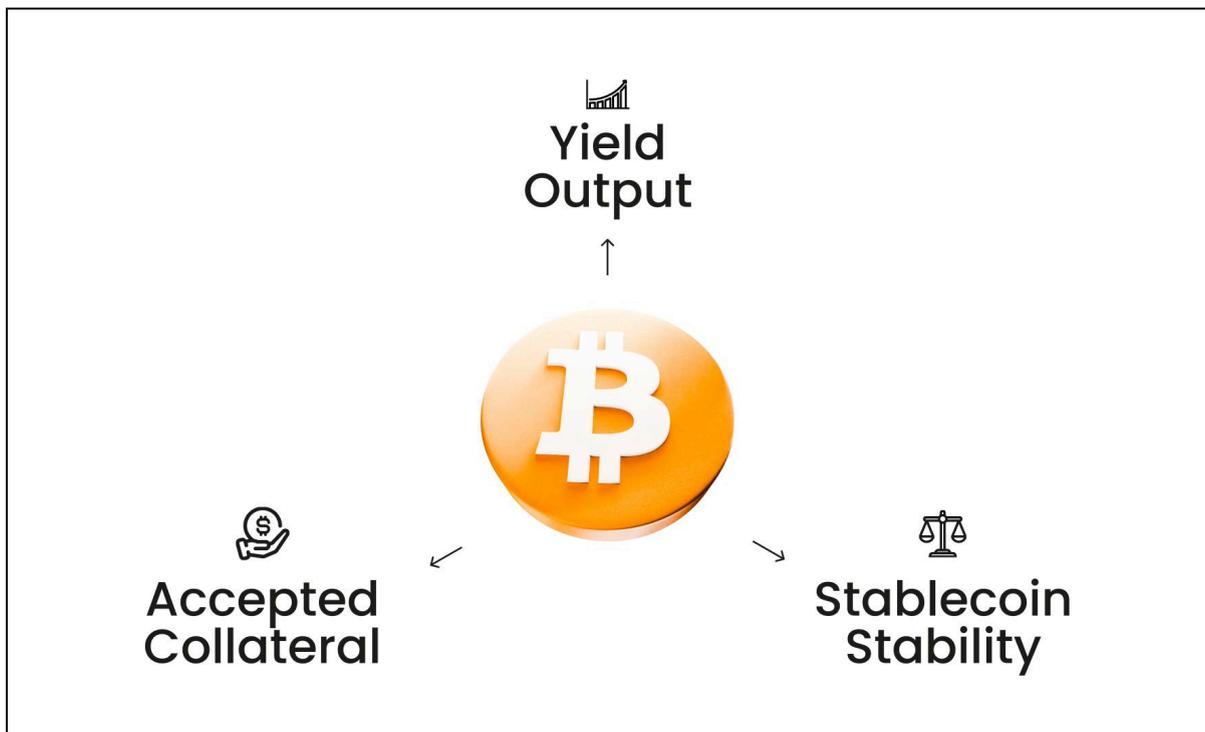
## Understanding Bitcoin Backed Stability

Bitcoin-backed stability starts with a simple rule: **Bitcoin is the only collateral.**

*That means stablecoin issuance and yield are grounded in Bitcoin exposure via cbBTC, not diversified baskets, governance-managed reserves, or reflexive incentive loops.*

Bitcoin stands apart as the most trusted and most liquid crypto asset, a position it has reinforced across multiple market cycles. It remains the largest digital asset by market capitalization and has no real peer in terms of global adoption or market depth. That depth of liquidity is what makes BTC such strong collateral. Even in volatile conditions, positions can typically be liquidated efficiently with relatively low slippage compared with other digital assets. With daily trading volume often exceeding \$50 billion across global venues, Bitcoin provides the scale and resilience needed for collateral-backed financial products.

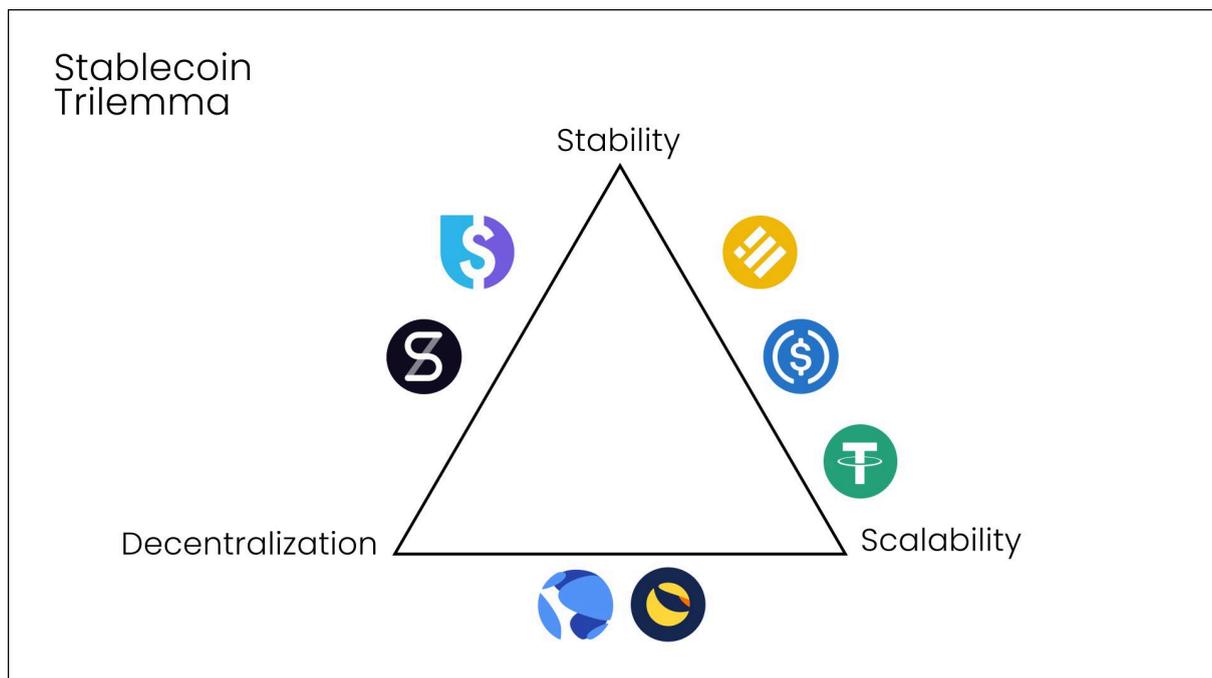
Institutional-grade wrappers such as cbBTC add further operational clarity. Regulated custody, stronger compliance standards, and clearer counterparty assumptions reduce risk relative to many alternative collateral frameworks. Combined with Bitcoin's long trading history and established market structure, this creates a more predictable foundation for risk modeling than newer, thinner, or more reflexive assets.



## The Stablecoin Trilemma

Stablecoins sit at the center of crypto's promise: a digital dollar that moves globally, instantly, and without permission. But like blockchains, stablecoins face a trilemma of their own.

Designing a stablecoin is not just about holding a peg. It is about balancing three competing goals: **stability**, **decentralization**, and **scalability** through sufficient capital efficiency. Most systems can optimize for two, but struggle to achieve all three at once.



**Fiat-collateralized stablecoins** maintain direct backing by traditional currencies held in bank accounts. Their strength lies in intuitive stability and simple mental models. However, this approach sacrifices the core values that make cryptocurrency revolutionary: decentralization, transparent reserves, and permissionless global access.

**Crypto-collateralized stablecoins** use onchain assets as collateral, typically requiring significant overcollateralization to account for volatility. These systems preserve decentralization and transparency, with collateral that is verifiable onchain. Yet the trade-off is reduced capital efficiency, forcing users to lock substantially more value than they can borrow, which limits scalability and accessibility. In addition, their circulating supply is heavily shaped by market cycles, expanding when borrowing demand is strong and contracting when leverage is unwound, meaning stablecoin demand and stablecoin supply often move in opposite directions over time.

**Algorithmic stablecoins** attempt to maintain stability through supply adjustments rather than direct collateral backing. They offer maximum capital efficiency with little to no collateral requirements. However, historical failures have repeatedly exposed structural fragility during market stress, where the peg often depends on reflexive demand and sustained confidence.

*Gyndore sits in the middle of these paradigms, combining the capital efficiency that approaches fiat-backed systems with the decentralization and transparency of crypto-collateralized models, all while remaining scalable.*

## Gyndore's Approach

Gyndore functions as **both** a stablecoin protocol and a specialized money market for Bitcoin, with gynUSD as its output. By focusing exclusively on Bitcoin collateral, the protocol concentrates risk around a single, well-understood asset with the deepest liquidity profile in crypto, rather than spreading exposure across dozens of heterogeneous tokens with highly variable risk characteristics.

Unlike general-purpose money markets, which depend on lenders supplying capital upfront and then distributing yield across a pooled base of liquidity, Gyndore mints gynUSD on demand when users open or increase debt on a CDP. Users deposit cbBTC as collateral to mint gynUSD, the protocol's dollar-pegged stablecoin. Each position must remain above a 110% minimum collateralization ratio, allowing borrowing up to roughly 90.91% loan-to-value. This is materially more capital efficient than the 70 to 80% loan-to-value ratios commonly seen in multi-asset money markets.

When opening a position, borrowers also post a \$100 liquidation bond in cbBTC, calculated at the prevailing spot price and held separately from collateral. This bond does not count toward the collateralization ratio and does not require top-ups if BTC falls in price. The cbBTC amount is fixed at the time of deposit. If the position is liquidated, the liquidator receives the full bond as compensation. If the borrower closes the position voluntarily, the bond is refunded in full.

The \$100 liquidation bond is designed to remain viable even under extreme conditions. Historical BTC drawdowns from recent cycle peaks have rarely exceeded 80%, and liquidation transactions on Base typically cost around \$0.05 to \$0.10. Even after an 80% drawdown, the remaining bond value would still be roughly \$20, which remains far above expected gas costs and helps keep liquidations economically viable without imposing excessive upfront costs on borrowers. To reduce grieving risk, each position must maintain a minimum debt balance of 1,000 gynUSD.

This CDP-based structure avoids the idle liquidity inefficiencies common in lending pools. Borrower interest is generated by actual borrowing activity and routed directly to protocol participants through a hardcoded revenue split: 70% to gynUSD Stability Pool depositors and 30% to GYND stakers after the fee switch, or to the designated admin recipient during the bootstrapping phase before the fee switch.

Because yield is not diluted across unused deposits, rates can remain competitive for borrowers while still producing attractive market-relative returns for suppliers. This design also removes the need for utilization curves, which are common in traditional money markets and often cause sudden interest rate spikes when liquidity becomes scarce.

Interest accrues continuously on outstanding debt at the prevailing borrow rate, which means a position's effective collateralization ratio gradually declines over time unless the borrower repays debt or adds collateral. Borrow rates are governed by the Pareto Controller, where GYND holders vote only in direction using a two-option system. Changes occur in fixed  $\pm 10$  basis point increments, are bounded between 1% and 20%, and remain smoother and more predictable than utilization-curve-driven rates.

This also strengthens incentive alignment, since GYND holders benefit from sustainable borrowing demand and long-term protocol growth.

Core protocol parameters are immutable from deployment. There are no discretionary levers, admin-managed settings, or manual emergency controls that can be changed after launch. Under the bootstrapping launch configuration, a predefined, one-time, irreversible fee switch disables the admin key and activates GYND's on-chain role in revenue sharing and borrow rate governance once sufficient liquidity and growth milestones are reached.

If the protocol launches with the fee switch pre-activated and GYND distributed from day one, no admin key is ever active and GYND's on-chain role is live from the first block. After the fee switch is executed, no privileged actions remain. The only parameter that can move is the borrow rate, and even that is adjusted strictly through the Pareto Controller's constrained voting mechanism. This gives participants a predictable and rule-based system aligned with blockchain principles of neutrality, transparency, and censorship resistance.

The Stability Pool is the core mechanism that enables a low minimum collateralization ratio and efficient liquidations while preserving a decentralized system design. If a decline in BTC price or accumulated interest causes a CDP to fall below the 110% minimum collateralization ratio, the protocol liquidates it through the Stability Pool first.

This acts as the primary line of defense, absorbing debt in an orderly way and providing first-loss protection to the system. If the Stability Pool does not have enough capital to fully absorb a liquidation, the protocol falls back to redistribution as a secondary and final defense layer.

Any remaining debt and collateral are distributed proportionally across active CDPs based on their share of total collateral. This mechanism helps preserve system solvency even during extreme market conditions, including scenarios where the Stability Pool is temporarily depleted.

Borrowers should also understand redemption risk. Any gynUSD holder can redeem for cbBTC at face value minus a fee, and redemptions are processed against existing CDPs starting with the smallest debt positions, including accrued interest, first.

This ordering is an intentional design choice that keeps the redemption queue efficient and self-clearing, while giving larger positions some natural protection by placing them further back in the queue. Even a healthy position can be redeemed against. A borrower does not lose value in a redemption because the debt is reduced together with a proportional reduction in collateral. In some cases, the affected position's collateralization ratio may actually improve because the fee portion is retained in the CDP as collateral.

However, the position may shrink or close without any action from the borrower. In practice, redemptions are expected to be infrequent. The combination of Stability Pool yield, borrowing demand, and the redemption fee structure creates strong incentives to hold and use gynUSD rather than redeem it, so redemptions are intended to function primarily as a peg backstop rather than a routine mechanism.

Each CDP is also represented as a transferable NFT, enabling position transfers, more flexible management, and secondary market trading. By supporting only one collateral type and one borrowing flow, Gyndore can offer a cleaner product experience than multi-asset platforms that must handle asset-specific parameters, multiple risk models, and fragmented liquidity.

*For borrowers, the mental model is straightforward: deposit cbBTC, mint gynUSD, monitor your collateral ratio, and keep a healthy buffer above 110% — that's all.*

## Stability Pool & Liquidations

The Stability Pool is designed to do two things: **generate yield for gynUSD stakers** and **act as a liquidation backstop to prevent bad debt**.

Depositors earn 70% of all interest revenue paid by borrowers, distributed pro rata based on each depositor's share of the pool, with the remaining 30% flowing to GYND stakers post fee switch.

If the protocol launched under the bootstrapping configuration, the 30% share flows to the admin key until the fee switch is executed, at which point it redirects permanently to GYND stakers. If the protocol is launched with GYND active from day one, the 30% share flows to GYND stakers from the first block. In addition to interest yield, gynUSD stakers in the stability pool also receive cbBTC collateral gains from liquidations, which are distributed separately and on top of the 70% interest share they already receive.

When a CDP falls below the 110% minimum collateralization requirement, it becomes eligible for liquidation to prevent bad debt from accumulating. Liquidations are permissionless, meaning anyone can trigger them. Arbitrageurs and bots are incentivized to monitor the protocol and execute liquidations promptly because they receive the full cbBTC liquidation bond as compensation.

Once a liquidation is triggered, the Stability Pool is the first line of defense. The protocol uses gynUSD deposited by Stability Pool stakers to repay the liquidated CDP's debt, and in return the Stability Pool receives the CDP's cbBTC collateral.

This process affects all Stability Pool participants proportionally. Each depositor's gynUSD balance is reduced based on their share of the pool to absorb the debt, and each depositor receives a proportional share of the liquidated cbBTC collateral. Because liquidations occur below the minimum collateralization threshold, Stability Pool stakers are effectively exchanging gynUSD for cbBTC at a discount, creating liquidation gains that are distributed across the pool.

For example, if the Stability Pool contains 100,000 gynUSD and a CDP with 10,000 gynUSD of debt is liquidated, the pool burns 10,000 gynUSD to repay the debt and receives cbBTC collateral worth \$10,500 from the CDP (the debt value plus a 5% liquidation bonus).

A depositor with 10,000 gynUSD in the pool (10% share) would see their balance reduced by 1,000 gynUSD and receive cbBTC worth \$1,050 in return, netting a \$50 gain from the liquidation. Any remaining collateral after the debt repayment and liquidation bonus becomes claimable by the CDP owner via the surplus mechanism.

Liquidations can be processed in batches, allowing a single transaction to clear multiple underwater CDPs simultaneously. This improves efficiency during market stress when many positions cross the 110% threshold at once, ensuring bad debt is cleared quickly before positions deteriorate further. Batch processing reduces the window during which underwater positions can accumulate additional losses.

Depositors can withdraw their gynUSD at any time, with no restrictions based on system state or liquidatable positions. The Stability Pool incentivises participation through yield rather than through coercion. This design ensures depositors always retain full exit optionality, which in turn encourages greater voluntary participation and deeper pool liquidity. After each liquidation, any pending interest and collateral gains are automatically claimed on withdrawal.

If the Stability Pool cannot fully absorb a liquidation, the protocol falls back to redistribution as the second and final-line backstop. Redistribution spreads the liquidated CDP's debt and collateral across all active CDPs, proportional to each recipient's share of total system collateral. Recipient CDPs see their debt and collateral increase simultaneously, absorbing the liquidated position at approximately its original collateral ratio (just under 110%). This keeps the system solvent even if the Stability Pool is empty or drained mid-event.

For example, consider a 10,000 gynUSD debt liquidation with \$10,800 worth of cbBTC (108% collateralization) to redistribute across two CDPs holding 2 cbBTC and 3 cbBTC respectively. The 2 cbBTC CDP (40% of total collateral) receives 4,000 gynUSD of additional debt and \$4,320 of cbBTC. The 3 cbBTC CDP (60% of total collateral) receives 6,000 gynUSD of additional debt and \$6,480 of cbBTC. Both recipient CDPs absorb debt at the same ratio as the liquidated position, functioning as collective insurance during extreme market conditions.

The outcome for a liquidated user is less favorable under redistribution than under Stability Pool liquidation. When the Stability Pool absorbs a liquidation, depositors receive collateral worth 105% of the debt, meaning the liquidated user retains any surplus collateral above that threshold.

Under redistribution, the entire position (debt plus all remaining collateral) is absorbed by other CDPs, leaving the liquidated user with no surplus. This difference creates a natural incentive for gynUSD holders to deposit into the Stability Pool, since a well capitalized pool protects both the system and individual CDP owners from the less favorable redistribution outcome.

In extremely rare cases, a CDP may be liquidated when the collateral is worth less than 105% of its debt (for example, due to rapid price movement between liquidation eligibility and execution). In this situation, the Stability Pool receives all available collateral even if it is below the standard 5% bonus, and may take a small loss if the liquidation proceeds do not fully cover the gynUSD being burned.

## Maintaining the gynUSD Peg

For gynUSD to function as a medium of exchange, store of value, and unit of account, users must trust that 1 gynUSD remains worth approximately \$1.00. Gyndore maintains this stability using two complementary systems: hard-peg mechanisms and soft-peg mechanisms.

*Hard-Peg Mechanisms:* enforce price boundaries through direct arbitrage. When gynUSD trades too low, redemptions convert gynUSD into cbBTC at near face value. When gynUSD trades too high, minting becomes profitable and increases supply. Together, these create a floor and ceiling that bound gynUSD's market price to a predictable range, approximately \$0.995 to \$1.10.

*Soft-Peg Mechanisms:* operate inside these boundaries by shifting incentives. Borrow rates and Stability Pool yield guide supply and demand toward \$1.00 without requiring discretionary intervention.

### **Hard Floor: Redemptions (≈ \$0.995)**

Redemptions create a hard price floor by allowing any gynUSD holder to redeem gynUSD for cbBTC at face value, minus a redemption fee. When gynUSD trades below \$1.00, arbitrageurs can buy discounted gynUSD on the open market, redeem it for approximately \$1.00 worth of cbBTC minus fees, and profit from the spread. This buying pressure pushes gynUSD back upward toward \$1.00.

Because the minimum redemption fee is 0.50%, redemption becomes meaningfully profitable only when gynUSD trades below roughly \$0.995. As redemption volume increases, the fee rises temporarily, which dampens excessive redemption flow while preserving strong downward peg protection.

### **Redemption Queue and Ordering**

Redemptions are processed against CDPs through a deterministic queue ordered by total debt inclusive of accrued interest, smallest first. This ordering makes redemption behavior predictable and gives larger CDPs natural queue protection.

Redemptions skip any CDP with a collateralization ratio below 100%. Processing an underwater position would require the redeemer to accept collateral worth less than the gynUSD being burned, which is value-destructive for the redeemer.

Underwater positions are left for the liquidation mechanism, which is designed to handle bad debt through the Stability Pool and redistribution. This ensures redeemers always receive collateral worth at least the face value of their gynUSD minus the redemption fee.

## Redemption Payout Formula

For a redemption of  $m$  gynUSD, the cbBTC paid out to the redeemer is:

$$cbBTC\_out = m \times (1 - f(t)) \div P\_cbBTC(t)$$

Where  $f(t)$  is the redemption fee rate at time  $t$ , and  $P\_cbBTC(t)$  is the cbBTC/USD oracle price. The fee portion is not paid out to the redeemer. Instead, it remains inside the CDP as retained collateral, meaning redemptions can reduce a CDP's debt while removing slightly less collateral proportionally. As a result, redemptions can improve the affected CDP's collateralization ratio even as they deleverage it.

## Partial and Full Redemptions

If a redemption amount exceeds the debt of the current CDP, that CDP is fully redeemed first and the remainder continues to the next CDP in the queue. When a CDP's debt reaches zero, the position closes automatically, and any remaining collateral becomes claimable by the former owner.

The liquidation bond is also returned on full closure as part of the claimable surplus. Partial redemptions may reduce a CDP's debt to any amount, including below 1,000 gynUSD. Because the protocol redeems smallest debt positions first, any CDP reduced to a small balance is naturally the next to be fully consumed, keeping the queue self-cleaning without requiring a minimum debt floor during redemptions.

If a redemption cannot be fully filled because insufficient CDP debt remains in the queue, the transaction completes with a partial fill rather than reverting. The redeemer receives collateral for the amount that was successfully redeemed, and only that portion of their gynUSD is burned.

This ensures redemptions always succeed to the extent possible, even during volatile periods when CDPs may be closed or liquidated simultaneously between transaction submission and execution.

## Redemption Fee Function

Gyndore's redemption fee follows a minimum fee plus a time-decaying base rate that spikes with redemption volume.

### Fee Definition

$$f(t) = f\_min + b(t)$$

Where  $f\_min = 0.005$  (0.50%) and  $b(t)$  is the base rate.

## Base Rate Spike on Redemption

When a redemption occurs at time  $t_j$ , the base rate increases based on the fraction of total supply redeemed:

$$b(t_j) = b(t_{(j-1)}) + \beta \times (m \div n)$$

Where  $m$  is the redeemed amount,  $n$  is the total gynUSD supply, and  $\beta = 1$ .  $\beta$  controls fee sensitivity. With  $\beta = 1$ , redeeming 1% of total supply increases the base rate by approximately 1 percentage point. The base rate initializes to 0 at protocol launch.

## Base Rate Decay (6-hour Half-Life)

Between redemptions, the base rate decays exponentially toward 0 with a 6-hour half-life:

$$b(t) = b(t_0) \times 2^{(-\Delta t \div 6h)}$$

This discourages sustained redemption pressure while still allowing smaller arbitrage redemptions to restore the peg efficiently.

## Redemption Fee Slippage Protection

Redeemers can specify a maximum acceptable fee rate when initiating a redemption. If the actual fee at execution time (including any base rate increase from concurrent redemptions landing in the same block) exceeds this maximum, the transaction reverts. This protects redeemers from unexpected fee spikes due to front-running or simultaneous redemption activity, ensuring they never pay more than their specified tolerance.

## Hard Ceiling: Minting Arbitrage (\$1.10)

The 110% minimum collateralization ratio creates a natural price ceiling near \$1.10. Above this level, arbitrage is mechanically profitable: users can mint gynUSD against cbBTC at 110% and sell into the premium.

Example: if gynUSD trades at \$1.15, an arbitrageur deposits \$11,000 of cbBTC, posts the \$100 liquidation bond, mints 10,000 gynUSD, and sells for \$11,500, capturing \$400 gross profit above total outlay (\$11,000 collateral + \$100 bond).

If they later buy back near \$1.00 and close, they recover full collateral and bond and keep the spread. Alternatively, they can walk away and be liquidated, forfeiting the \$100 bond and paying the 5% liquidation penalty, but at scale the premium can still outweigh these costs. This mint and sell loop increases supply until price compresses back toward \$1.10.

Between \$1.00 and \$1.10, minting becomes progressively more attractive but carries risk. Arbitrageurs must factor borrow interest, execution timing, and price movement while the CDP stays open, creating softer upward supply pressure that intensifies toward \$1.10.

### **Soft Peg Mechanisms**

Hard boundaries enforce absolute limits. Soft mechanisms influence behavior inside those limits by shifting incentives across borrowers, Stability Pool depositors, and GYND voters.

### **Peg Feedback**

The borrow rate determines Stability Pool yield, creating a direct feedback loop between borrowing demand and stablecoin demand. When gynUSD trades below \$1.00, redemption pressure signals oversupply. At the same time, falling Stability Pool participation is often a sign that depositors are not being compensated with sufficient risk-adjusted returns, causing them to exit gynUSD for other stablecoin opportunities offering higher risk-adjusted returns elsewhere.

In response, GYND holders can vote to raise rates in  $\pm 10$  basis point increments, increasing Stability Pool yield and attracting more gynUSD into the pool. This reduces circulating supply, thus supporting the peg.

When gynUSD trades above \$1.00, lower rates make borrowing cheaper and reduce Stability Pool yield, encouraging new supply through minting and reducing demand-side pressure from stability pool depositors.

### **Borrower Behavior Under Peg Deviations**

When gynUSD trades below peg and interest rates begin to rise, borrowers can respond by repaying debt, maintaining higher collateral buffers.

These behaviors reduce circulating supply during oversupply conditions. When gynUSD trades above peg, redemption risk is low and borrowing demand typically increases, expanding supply back toward equilibrium.

### **Stability Pool as a Peg Anchor**

The Stability Pool reinforces gynUSD stability through two channels: supply absorption and system backstopping. gynUSD deposited into the pool is removed from liquid circulation and cannot be sold, which reduces sell pressure and helps smooth secondary-market price behavior as the pool grows relative to total supply.

In parallel, the pool provides first-loss liquidity for liquidations, strengthening confidence in gynUSD's backing during stress events. Because Stability Pool

depositors earn a fixed share of borrower interest regardless of liquidation frequency, the pool can remain attractive even in low-volatility conditions.

The Stability Pool also contributes to downward peg pressure when gynUSD trades above \$1.00. During liquidations, depositors' gynUSD is burned at face value while they receive cbBTC collateral worth 105% of the debt (the 5% liquidation bonus).

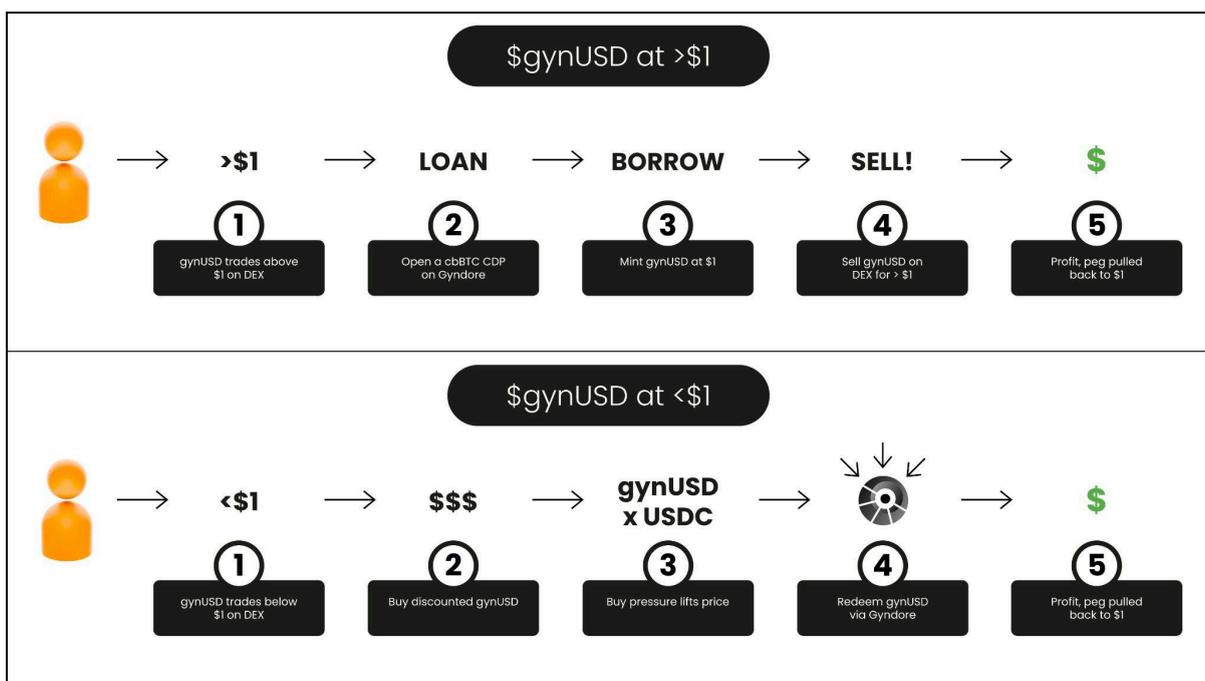
If gynUSD trades significantly above peg, this exchange becomes less favorable because the market value of the burned gynUSD exceeds the dollar value of the cbBTC received. As the price of gynUSD rises, depositors face increasing risk of negative returns from liquidations, which incentivizes them to withdraw and sell into the premium. This selling pressure helps push gynUSD back toward \$1.00.

### Schelling Point Coordination

The \$1.00 peg acts as a natural coordination focal point. Market participants expect mean reversion and tend to position around the floor and ceiling, reinforcing the stabilizing forces created by arbitrage and redemption mechanics.

### Summary

gynUSD's peg stability is enforced by hard arbitrage boundaries and reinforced by softer economic incentives. Redemptions create a floor near \$0.995, minting economics create a ceiling near \$1.10, and borrow rate plus Stability Pool dynamics guide supply and demand back toward \$1.00 within that band. The result is a predictable, rules-based peg system that does not rely on discretionary intervention.

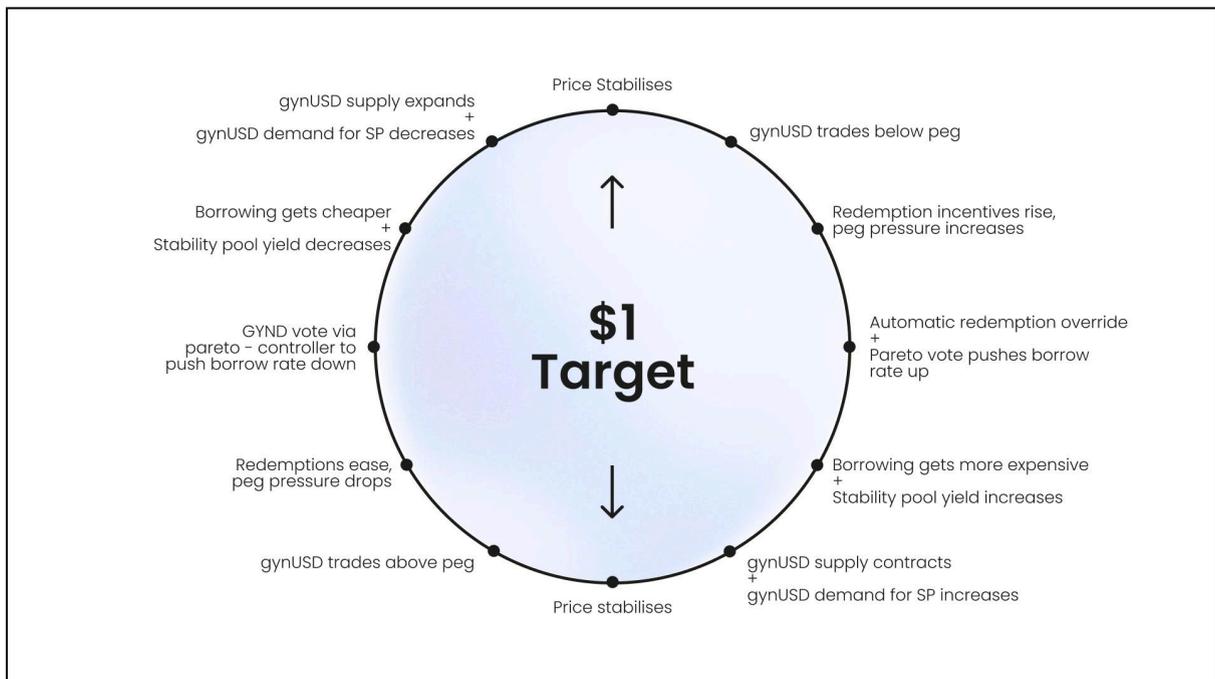


## The Pareto Controller

The Pareto Controller is Gyndore's minimalist governance mechanism for adjusting the protocol's borrow rate, and the only variable that can be altered post deployment.

It exists because the borrow rate is the system's primary balancing lever, shaping borrowing demand, Stability Pool yield, and gynUSD's peg behavior. Rather than expanding governance across many parameters, Gyndore limits governance to a single, tightly scoped control surface that can respond to market conditions without introducing broad governance risk.

This design is informed by the lessons of MakerDAO. Maker demonstrated that interest rate policy is essential for stablecoin equilibrium, but it also highlighted the risks of large governance scope, including parameter sprawl, unpredictable interventions, and governance capture.



The Pareto Controller retains rate policy as the adjustment mechanism, while removing the complexity and attack surface that comes from making the rest of the protocol mutable. Rate adjustments are incremental and bounded. Changes occur in fixed  $\pm 10$  basis point steps, with a minimum rate of 1% and maximum rate of 20%.

The Pareto Controller is governed by GYND token holders once GYND is active, or by the admin key during the bootstrapping phase prior to the fee switch. GYND holders are positioned as the most neutral party in the system. Borrowers prefer lower rates, Stability Pool depositors prefer higher yield, but GYND holders benefit from long-term protocol health.

Since unstable peg behavior reduces usage and revenue, their incentives align with maintaining equilibrium rather than extracting from either side.

The voting model is continuous and direction-based. GYND holders register their vote behind UP or DOWN, with no change as the default outcome unless the community actively coordinates. To execute a change, a direction must reach at least 80% consensus, meet a minimum participation threshold of 1% of total supply, and survive a 24-hour challenge window.

This makes rate moves deliberate, measurable, and resistant to manipulation. The controller also includes an automatic redemption override that biases toward safety during stress. If redemptions exceed a defined threshold, the protocol can force an immediate +10 basis point rate increase and reset the vote cycle, providing a deterministic response to below-peg pressure without expanding governance powers beyond the single rate lever.

## Pareto Controller Voting Cycle

*Gyndore's Pareto Controller uses a simple two stage voting system;*

### Voting Options

Option	Effect
UP	Apply +10 bps to borrow rate
DOWN	Apply -10 bps to borrow rate

### Voting Weights

Variable	Definition
U	Total GYND voting weight registered to UP
D	Total GYND voting weight registered to DOWN
T	U + D (total participating weight)

### Voting Outcomes

Scenario	Outcome
Either threshold ( $\geq 80\%$ consensus, $\geq 100k$ GYND ) not met	Rate unchanged
Qualified direction falls to $\leq 50\%$ in Stage 2	Rate unchanged, cycle resets
Qualified direction survives 24h challenge	Rate moves $\pm 10$ bps
Redemption override triggers	Rate moves +10 bps, any ongoing vote cancelled

## Stage 1: Qualification

A direction (UP or DOWN) becomes qualified the moment it meets both conditions:

1.  $\geq 80\%$  consensus, at least 80% of participating voting weight supports that direction
2.  $\geq 1\%$  participation (100,000 GYND) based on the fixed supply of 10 million GYND

Formally, UP qualifies when:

$$U / (U + D) \geq 0.80 \text{ AND } (U + D) \geq 100,000$$

DOWN qualifies symmetrically with D replacing U. Once both thresholds are crossed, the system immediately advances to Stage 2.

During Stage 1, GYND tokens remain freely transferable in participants' wallets. Participants can add, remove, or switch their registered vote at any time. The 1% minimum is calibrated to be low enough for legitimate proposals to pass while high enough to make attacks uneconomical.

## Stage 2: Challenge Window (24 hours)

Once qualified, a 24-hour defense period begins. All GYND tokens held by registered voters are locked in their wallets and cannot be transferred for the duration of Stage 2.

Stage 2 functions as a confirmation vote. The qualified direction must maintain strictly greater than 50% of ALL participating votes to survive:

If UP qualified: survives if  $U / (U + D) > 0.50$

If DOWN qualified: survives if  $D / (U + D) > 0.50$

Opposition is the opposite direction (eg; if UP qualified, opposition = DOWN)

Rules during Stage 2: Registered voters cannot transfer their GYND or switch their vote direction. Participants can register additional GYND to their existing position. New participants can join either side, with their tokens becoming locked in their wallets immediately upon registering.

Majority is evaluated on every state change; if the qualified direction falls to 50% or below, the vote cancels immediately (a tie means the initiative fails).

Cancellation: If the qualified direction loses majority at any point, the proposal cancels and resets to Stage 1

Round reset: After Stage 2 ends (pass or cancel), all GYND tokens are unlocked and vote registrations clear, requiring users to re-register directional votes for the next cycle.

The 1% minimum participation threshold (100,000 GYND) prevents "ping-pong" attacks where a small holder could instantly trigger Stage 2 after a reset by being the only participant. Any new vote must still attract enough participation to meet the 1% threshold and achieve 80% consensus.

## **Execution**

If the qualified direction survives the full 24 hour challenge window, the protocol executes exactly one borrow rate adjustment in the qualified direction, either +10 bps or -10 bps, with the result clamped within the 1% minimum and 20% maximum borrow rate bounds.

Only one step can be executed per voting cycle. After execution, the round closes, all vote registrations are cleared, and the system resets to Stage 1 for a new qualification process.

If the borrow rate is already at 1%, DOWN cannot be executed. If the borrow rate is already at 20%, UP cannot be executed. These limits are enforced onchain and will also be reflected in the UI.

## Redemption Override

An automatic safety mechanism that forces interest rate increases during periods of elevated redemption pressure. It takes priority over governance.

The override is triggered by an exponentially weighted moving average (EMA) of the redemption rate, rather than a raw spot value or a simple rolling tally.

The protocol maintains an EMA of the ratio of gynUSD redeemed and burned relative to total circulating gynUSD supply, using a 24-hour half-life and updating on every redemption event. This smooths short-lived spikes caused by isolated large redemptions while still responding to sustained peg pressure.

*When the EMA exceeds 1.0% of total circulating supply, the override activates.*

This threshold is calibrated using historical redemption patterns observed in similar protocols, where sustained daily redemptions above 1% of supply typically signal meaningful peg pressure and justify a rate adjustment. Because the EMA decays toward zero between events and requires persistent redemption activity to breach the threshold, a single large redemption should not trigger the override on its own.

Effects: The override applies +10 bps immediately and cancels any in-progress vote cycle. All GYND tokens are unlocked and vote registrations clear, requiring users to re-register directional votes for the next cycle. The system resets to Stage 1 with the new rate as baseline and starts a 24-hour cooldown.

Cooldown & Implementation: Maximum one override per 24 hours. If the > 1% threshold is met during an active cooldown, the override is ignored, it does not queue for later execution. The EMA initializes to 0 at protocol launch and continues decaying during cooldown periods. "Redeemed and burned" must reflect net supply reduction from the redemption mechanism only.

In rare cases where a governance vote executes and redemption pressure triggers shortly after, the rate may increase by up to +20 bps within a 24-hour period (+10 from vote, +10 from override).

If a DOWN vote executes followed by an override, the net effect is 0 bps. This asymmetry is by design, redemption pressure always biases toward rate increases to protect peg stability.

## Safety Mode

The Total Collateralization Ratio (TCR) is Gyndore's system-wide health metric. It measures the aggregate collateral backing across the entire protocol rather than evaluating individual CDPs in isolation.

$$TCR = (Total\ Collateral\ Value\ in\ USD) / (Total\ gynUSD\ Debt) \times 100\%$$

When the TCR falls below 150%, the protocol automatically enters Safety Mode. Safety Mode is evaluated against the real-time spot TCR and activates or deactivates immediately as the ratio crosses the threshold. This ensures the system responds instantly to changes in collateralization without delay.

Safety Mode restricts actions that would further deteriorate system collateralization while leaving health-improving actions unrestricted. Critically, Safety Mode does not change the individual liquidation threshold. CDPs are only eligible for liquidation when their individual collateralization ratio falls below 110%, exactly as under normal conditions. Safety Mode does not make additional CDPs liquidatable, it only restricts operations that would worsen system health.

Two actions remain unrestricted regardless of the TCR or whether Safety Mode is active: adding collateral to an existing CDP and repaying debt, whether partially or in full. Both improve system health by definition and require no further check. Opening a new CDP requires the resulting TCR to remain at or above 150% (see Opening a CDP). This check applies at all times, not only during Safety Mode. This means highly overcollateralized CDPs are welcomed during stress because they improve system health, while aggressive positions that would worsen the ratio are blocked.

Closing a CDP is permitted only if the resulting TCR remains at or above 150%, using the real-time spot TCR to ensure immediate protection against large position exits that could abruptly weaken system collateralization. Combined collateral addition and new gynUSD minting is permitted only if the resulting TCR remains at or above 150%. Combined collateral withdrawal and debt repayment is permitted only if the USD value of collateral withdrawn does not exceed the USD value of debt repaid, ensuring the operation improves or maintains both the individual collateralization ratio and the system TCR.

Pure collateral withdrawal from an existing CDP without accompanying debt repayment is prohibited during Safety Mode. Pure new gynUSD minting without accompanying collateral addition that maintains TCR at or above 150% is also prohibited. All conditionally permitted operations still require the resulting individual CDP collateralization ratio to remain above 110%.

Safety Mode does not pause core protocol operations. Liquidations and redemptions continue normally, and the liquidation threshold remains unchanged, only CDPs

below 110% collateralization are eligible for liquidation, exactly as under standard conditions. In effect, Safety Mode acts as a precision risk-control layer that encourages capital inflows and strengthens system collateralization while rejecting only those actions that would worsen it.

To exit Safety Mode, the spot TCR must recover to strictly above 150%. Safety Mode can be exited through collateral price increases, borrowers repaying debt, borrowers adding collateral, or liquidations removing undercollateralized CDPs that improve the aggregate ratio. The Pareto Controller continues operating throughout Safety Mode, so borrow-rate governance remains active even while leverage-expanding actions are conditionally restricted.

## Shutdown Mode

If the TCR falls below 110%, or in the event of a complete oracle failure, where both the primary (Chainlink) and secondary (Redstone) price feeds revert, return zero, or become stale, the protocol enters an irreversible shutdown state. This threshold represents collective undercollateralization, meaning the system as a whole no longer maintains the minimum backing required for outstanding gynUSD.

In shutdown, all borrowing operations are permanently disabled except for closing CDPs entirely. No new CDPs can be opened, no debt can be increased, and no partial operations (such as adding collateral without closing, or partial repayments) are permitted. Stability Pool withdrawals remain available, allowing depositors to exit if they choose. Interest accrual halts entirely so debt balances stop growing. Urgent redemptions are enabled at zero redemption fee with a 2% collateral bonus, meaning redeemers receive \$1.02 worth of cbBTC for every 1 gynUSD redeemed.

This bonus incentivizes rapid debt clearance by making urgent redemptions immediately profitable. Liquidations continue to operate through the Stability Pool and redistribution mechanisms. Even the last remaining CDP can be closed during shutdown, since the priority is to clear all outstanding debt and return collateral as quickly as possible. The 150% TCR check that normally restricts CDP closures is bypassed during Shutdown Mode to allow orderly wind-down.

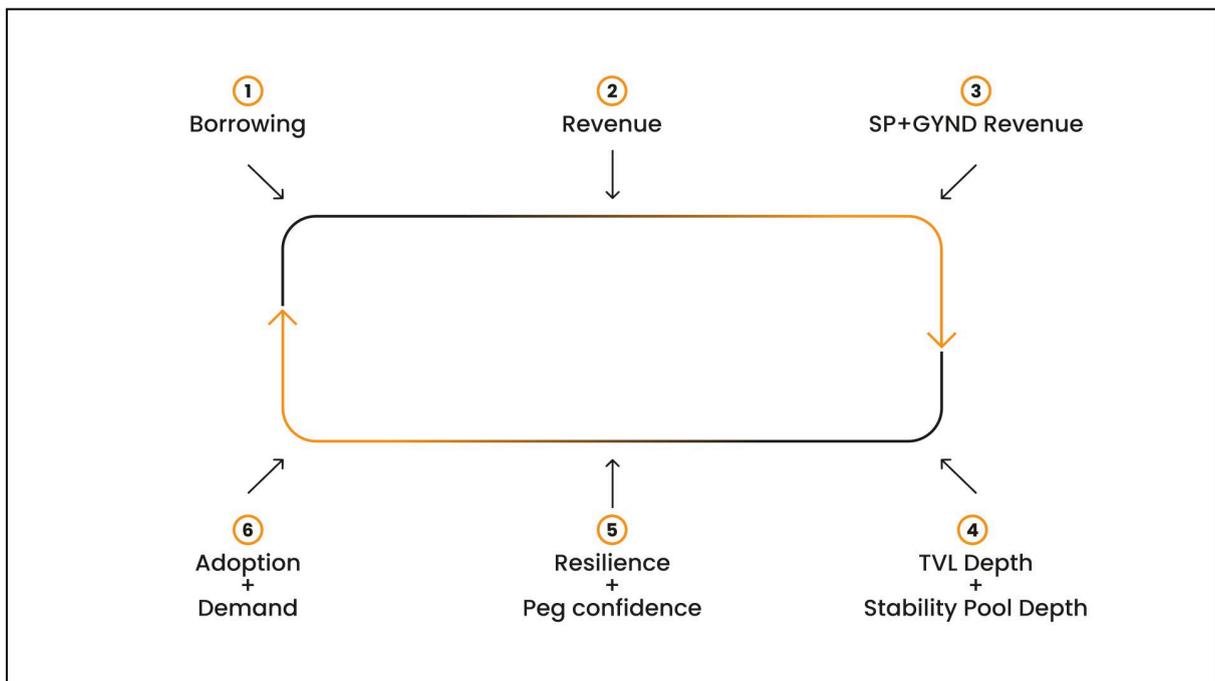
Shutdown is a one-way transition. Once triggered, the protocol winds down rather than attempting recovery. This avoids the complexity and governance risk of recovery mechanisms while ensuring an orderly resolution. The combination of zero-fee redemptions with a collateral bonus creates strong incentives for arbitrageurs to clear debt quickly, while frozen interest prevents the situation from worsening. At the moment of shutdown, all pending interest across all CDPs is minted and distributed through the standard 70/30 split. This ensures accrued revenue is fully settled before debt balances are frozen.

# The Gyndore Economic Flywheel

Gyndore is designed to be self-sustaining. Revenue comes directly from protocol usage, as cbBTC borrowers pay interest on the gynUSD they borrow. This creates a closed loop where the two groups that support the system are the ones paid by it: gynUSD holders who provide Stability Pool depth and GYND holders who govern rates and receive revenue share ( post fee-switch ). No external subsidies are required for the model to work.

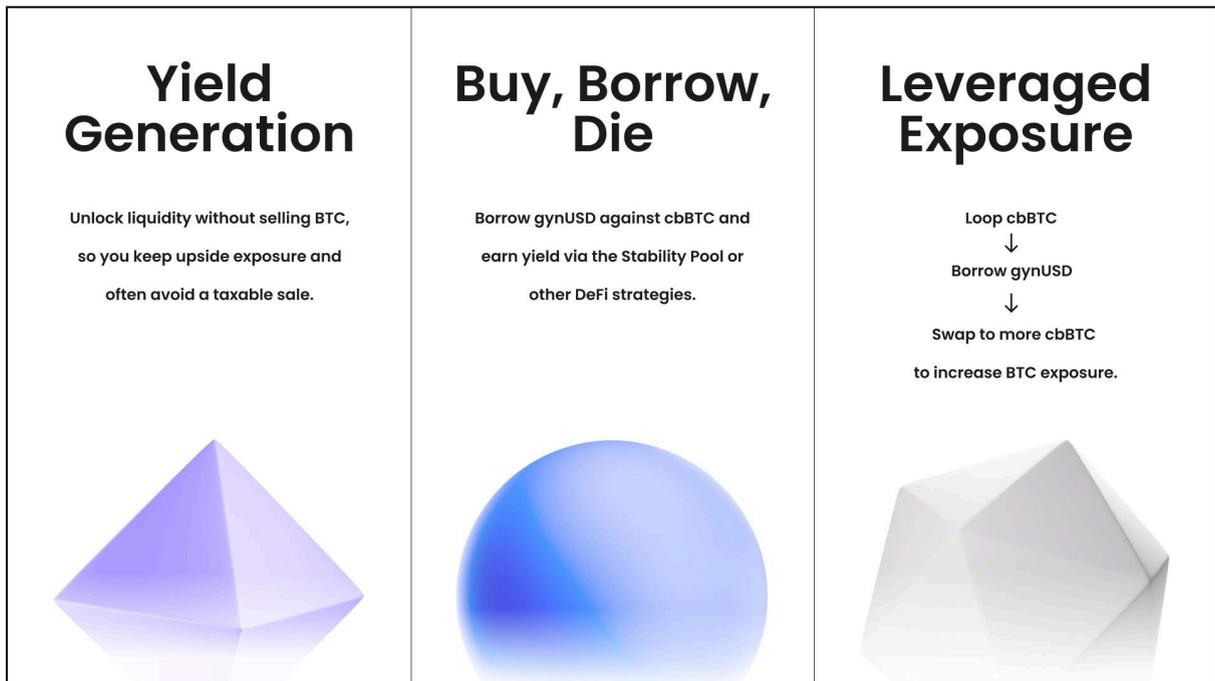
As borrowing demand grows, protocol revenue grows. Higher revenue improves Stability Pool yield and GYND staking rewards, which strengthens system depth, participation, and resilience. Rate adjustments then help manage peg conditions by tightening or loosening borrowing incentives as needed. The result is a flywheel that aligns protocol usage, peg stability, and long term incentives.

*Rates are not set by external oracles, and no discretionary intervention exists beyond the constrained GYND voting mechanism.*



# Why Borrow Against Your Bitcoin?

Simply put, the core idea behind borrowing against your BTC instead of selling is to access liquidity while maintaining price exposure. Selling Bitcoin gives up future upside and can trigger taxable events in many jurisdictions, while borrowing lets users unlock capital, keep ownership of the underlying asset, and remain tax efficient. Most users of Bitcoin-backed borrowing products fall into three broad categories:



## Buy, Borrow, Die

In many jurisdictions, selling cryptocurrency triggers capital gains tax on appreciation, while borrowing against an asset is typically not a taxable event. This enables the “buy, borrow, die” strategy: accumulate Bitcoin over time, borrow against it rather than selling, and pass the asset to heirs. Because the debt is dollar-denominated, it can become easier to repay if Bitcoin appreciates. Consult a tax professional for jurisdiction-specific advice.

## Yield Generation

Borrowing transforms Bitcoin from a passive holding into a productive asset. The simplest approach is to borrow gynUSD and deposit it into Gyndore’s Stability Pool to earn yield. If Stability Pool returns exceed the borrow rate, the user earns positive carry while remaining long Bitcoin. Borrowed gynUSD can also be deployed into external DeFi strategies.

## **Leveraged Exposure**

CDPs can be used to build leveraged long positions. Users can deposit cbBTC, borrow gynUSD, swap for more cbBTC, add it as collateral, and repeat. Each cycle increases BTC exposure, amplifying both gains and losses.

# Managing Your Collateralized Debt Position

## Opening a CDP

To open a CDP, the user deposits cbBTC as collateral and posts a \$100 liquidation bond in cbBTC, held separately from the main collateral balance. The user then selects how much gynUSD to mint, subject to a minimum debt of 1,000 gynUSD and the 110% minimum collateralization requirement. Once confirmed, the protocol mints gynUSD directly to the user's wallet and issues a transferable NFT that represents ownership of the CDP.

Also to note, opening a new CDP is only permitted if the resulting system-wide Total Collateralization Ratio (TCR) remains at or above 150%. This prevents any single position from pushing the system into Safety Mode.

The 1,000 gynUSD minimum debt requirement at creation exists to protect system performance during stress. It prevents griefing attacks where an adversary opens large numbers of micro-positions to clog liquidation processing during rapid price declines. Interest begins accruing immediately at the current borrow rate and compounds over time until repaid.

The 1,000 gynUSD minimum applies at CDP creation and during voluntary partial repayments, but is not enforced during redemptions. Because redemptions target the smallest debt positions first, any CDP partially redeemed below 1,000 gynUSD sits at the front of the queue and is naturally the first to be fully consumed by subsequent redemptions. This self-cleaning property eliminates the need for a minimum debt floor during redemptions and ensures the redemption loop never halts unnecessarily.

## Adding Collateral

Users can deposit additional cbBTC into an existing CDP to increase their collateralization ratio and reduce liquidation risk. This is commonly done when the position is approaching the 110% threshold, when volatility rises, or when the user wants to consolidate additional Bitcoin into an existing CDP rather than opening a new one. Adding collateral is always permitted and is one of the primary defensive actions available during drawdowns.

## Withdrawing Collateral

If a CDP becomes overcollateralized, users can withdraw excess cbBTC as long as the position remains above the 110% minimum collateralization ratio after the withdrawal. This is typically done after Bitcoin appreciates, when the user wants to rebalance across multiple positions, or when they want to free up collateral for other uses while keeping the CDP open.

## **Borrowing More**

Users can mint additional gynUSD against unused collateral capacity, provided the CDP remains above the 110% minimum collateralization ratio after accounting for the new debt. Borrowing more is typically done when additional liquidity is needed, when Bitcoin appreciation unlocks more borrowing headroom, or when the user sees a yield opportunity that exceeds their borrowing cost.

## **Repaying Debt**

Users can repay gynUSD to reduce outstanding debt, improve position safety, and lower ongoing interest costs. This is commonly done when borrow rates rise, when Bitcoin declines and the user wants a larger safety buffer, or when preparing to withdraw collateral or close the position.

## **Closing Entirely**

To close a CDP, the user repays all outstanding debt and withdraws all collateral, which burns the CDP NFT in the process. The position ceases to exist and the full cbBTC collateral and liquidation bond are refunded. If a CDP is fully redeemed against and its debt reaches zero, the position closes automatically, with any remaining collateral and the liquidation bond claimable by the CDP owner.

## Position Management Example

Consider a user who deposits 1 cbBTC when Bitcoin is priced at \$100,000 and mints 60,000 gynUSD. This results in a collateralization ratio of 167%. From this baseline, the user's decisions depend on changes in Bitcoin's price and the borrow rate.

### Scenario A: Bitcoin drops to \$80,000

If Bitcoin falls to \$80,000, the collateral value declines to \$80,000 while the debt remains 60,000 gynUSD, reducing the collateralization ratio to 133%. The position is still above the 110% liquidation threshold, but the buffer is thinner. The user may choose to add collateral, such as depositing an additional 0.25 cbBTC worth \$20,000, which restores the ratio to roughly 167% and returns the position to its original safety margin. Alternatively, they could reduce debt by repaying 20,000 gynUSD, bringing the balance down to 40,000 gynUSD and increasing the collateralization ratio to 200%. If the user expects Bitcoin to recover, they may also choose to hold the position unchanged while monitoring it closely, accepting the tighter margin temporarily.

### Scenario B: Bitcoin rises to \$140,000

If Bitcoin rises to \$140,000, the collateral value increases to \$140,000 against 60,000 gynUSD of debt, raising the collateralization ratio to 233%. This gives the user significantly more flexibility. They may withdraw some collateral, for example 0.3 cbBTC worth \$42,000, which lowers the collateralization ratio to approximately 163% while freeing Bitcoin for other uses. They may also increase borrowing by minting an additional 50,000 gynUSD, raising total debt to 110,000 gynUSD and bringing the collateralization ratio down to roughly 127%. This additional liquidity can be deployed into yield strategies, used for expenses, or held as reserve capital. Some users may go further and use the additional gynUSD to buy more cbBTC, deposit it back into the position, and borrow again, amplifying Bitcoin exposure through recursive leverage.

### Scenario C: Borrow rates rise to 10%

If the borrow rate increases to 10% through a Pareto Controller vote, the user's priority shifts toward managing carry costs. Higher rates make debt more expensive to maintain, so the user may choose to repay more aggressively to reduce interest burden and increase long-term safety. Another option is to deposit the borrowed gynUSD into the Stability Pool, which typically offers higher yields when borrowing demand rises. If the Stability Pool yield exceeds the borrow rate, the user can earn positive carry while staying long Bitcoin. If the user expects rates to normalize over time, they may also choose to keep the position unchanged and wait for GYND holders to vote the borrow rate downward, accepting temporarily higher costs rather than restructuring their CDP.

## GYND Token

GYND is Gyndore's native utility token. It serves two functions: holders stake GYND to earn 30% of all protocol revenue, and they can register GYND to vote on the protocol's only adjustable parameter, the interest rate for gynUSD borrowers. These are the only two things the token does, and they are designed to create direct incentive alignment between token holders and long-term protocol health.

All protocol revenue is generated from borrower interest. As debt balances grow through continuous accrual, corresponding gynUSD is minted and routed to active participants through a fixed split: 70% to gynUSD depositors in the Stability Pool and 30% to GYND stakers.

This split is *hardcoded* into Gyndore's immutable smart contracts. No governance vote, team decision, or upgrade mechanism can modify it. This permanently ties GYND holders, Stability Pool depositors, and overall protocol health to the same economic outcomes, enforced by onchain rules that cannot be changed.

### Revenue Sharing

GYND holders earn their share of the 30% allocation by staking. Rewards are paid continuously in gynUSD with no lock-ups or withdrawal delays. Users can stake to begin earning, unstake at any time with no penalty, claim accrued rewards without unstaking, or unstake and claim in a single transaction.

Because revenue is generated entirely from borrower interest, GYND staker returns scale directly with borrowing demand and protocol usage. The more gynUSD that is borrowed and the higher the prevailing rate, the more revenue flows to stakers.

### Rate Governance

Governance is separate from staking. Holders register their GYND to vote on the borrowing rate / interest charged to borrowers of gynUSD. Tokens remain in the holder's wallet and are only locked in-wallet during the Stage 2 challenge window. The same tokens cannot be used in both staking and governance simultaneously, so users must choose between earning revenue or influencing rates.

This tradeoff is a deliberate design feature. A large holder who stakes everything for yield gives up influence over the very rate that determines that yield. Conversely, a holder who commits tokens to governance sacrifices staking revenue to shape the rate environment they believe will maximize long-term protocol health.

This creates a natural tension that distributes participation across both functions rather than concentrating it in one. GYND holders govern rate policy because their incentives naturally balance the competing interests in the system. Borrowers prefer

lower rates, Stability Pool depositors prefer higher yield, but GYND holders are economically exposed to both sides.

If rates are set too high, borrowing demand drops and revenue declines. If rates are set too low, the peg weakens, usage falls, and revenue suffers equally. This self-correcting dynamic incentivizes voters to find the rate that sustains healthy borrowing demand while keeping the peg stable, rather than extracting from either side.

Rate changes are bounded between a floor of 1% and a ceiling of 20%. If the rate is already at either bound, the corresponding direction is disabled. This ensures that even sustained coordinated voting cannot push the rate outside a predefined range.

In addition to governance-driven rate changes, the protocol includes an automatic redemption override. If sustained redemption pressure exceeds a defined threshold (measured through an exponentially weighted moving average of redemptions relative to total supply), the protocol forces an immediate +10 bps rate increase and cancels any in-progress vote cycle.

This provides a deterministic safety response to below-peg pressure that does not depend on GYND holders coordinating quickly enough. GYND holders should understand that their governance authority can be temporarily overridden by market conditions when peg stability requires it.

## **GYND Token Activation & Launch Paths**

New stablecoin protocols face a coordination problem. Borrowers need confidence that liquidations will clear smoothly, which requires Stability Pool depth. Stability Pool depositors only commit capital when borrowing demand generates meaningful yield. Borrowers also need secondary market liquidity to sell gynUSD without significant slippage. Without both sides participating early, the system cannot sustain itself. Gyndore addresses this coordination problem through two possible launch configurations, determined by market conditions at the time of deployment.

### *Path A -- Bootstrapping Launch (Fee Switch Deferred)*

Under this configuration, GYND does not exist at mainnet launch. A team-held admin key controls rate governance and receives the 30% revenue share under strict constraints. This structure serves two purposes: it funds early protocol growth and it avoids distributing governance tokens before the ecosystem has the depth to support decentralized rate setting.

The 30% revenue share received by the admin key during this period is redirected toward liquidity incentives for gynUSD secondary markets, early Stability Pool depositor rewards, and other initiatives that build foundational protocol liquidity. The team also provides initial market-making capital via LP partnerships to ensure

borrowers can sell minted gynUSD at close to par value from day one. The bootstrapping phase is designed to bridge the coordination gap by seeding both sides of the market simultaneously until organic demand is self-sustaining.

Once secondary gynUSD market liquidity and Stability Pool depth are sufficient, a one-time, irreversible fee switch mints the fixed supply of 10 million GYND tokens and transfers the core functions of revenue sharing and rate governance to GYND. At the same time, the admin key is permanently disabled. From that point onward, GYND holders receive their 30% share in perpetuity, with no mechanism for dilution, modification, or revocation.

Because GYND tokens do not exist until the fee switch is executed under this path, the bootstrapping phase cannot be used to accumulate governance tokens. The team's only economic benefit during this period is the 30% revenue share, which is mainly redirected toward protocol growth rather than retained.

#### *Path B -- Day-One Launch (Fee Switch Pre-Activated)*

If sufficient market conditions exist for token distribution and capital formation prior to mainnet deployment, the protocol can launch with GYND minted and the fee switch pre-activated from day one. Under this configuration, mainnet launch and GYND token distribution coincide. The admin key is never active. GYND holders receive governance rights through the Pareto Controller and the 30% revenue share from the protocol's first block.

This path becomes viable when a successful capital raise and pre-launch token distribution provide the protocol with three prerequisites simultaneously: sufficient committed Stability Pool depth to backstop liquidations, adequate secondary market liquidity for gynUSD so that borrowers can sell minted gynUSD at close to par value, and a distributed GYND holder base with enough participation to govern rate policy through the Pareto Controller's consensus requirements.

By launching with GYND active immediately, the protocol achieves full immutability and decentralized governance from inception. There is no transitional period with admin key control, no trust assumption around the timing of the fee switch, and no ambiguity about when decentralization begins. The protocol is fully community-governed from its first block.

The team's role under this path shifts from post-launch bootstrapping to pre-launch coordination: structuring the capital raise, distributing GYND, seeding initial liquidity, and ensuring the ecosystem is ready to sustain itself at deployment. Once the contracts are deployed, the team holds no privileged position beyond whatever GYND allocation they retain as token holders on equal terms with all other participants.

*Under either path, once GYND is active, GYND holders receive their 30% share in perpetuity, with no mechanism for dilution, modification, or revocation. The 70/30 revenue split is hardcoded and immutable regardless of which launch configuration is used.*

## Gyndore vs General Money Markets

Gyndore functions as both a stablecoin protocol and a specialized money market built for Bitcoin holders who want maximum capital efficiency. Where multi-asset money markets serve broad audiences with standardized risk parameters across dozens of collateral types, Gyndore is optimized around a single asset: cbBTC. That focus eliminates the compromises inherent in multi-asset design and delivers higher capital efficiency, more predictable borrowing costs, and a cleaner product experience for Bitcoin-backed borrowing.

**Capital Efficiency:** General money markets typically offer 70 to 80% LTV for Bitcoin collateral, applying conservative buffers designed around their most volatile long-tail assets. Gyndore's single-collateral design supports 90.91% LTV through a 110% minimum collateralization ratio, calibrated specifically for Bitcoin's liquidity profile and enabled by the Stability Pool's role as a dedicated liquidation backstop.

**Interest Rate Predictability:** Multi-asset platforms rely on utilization-based rate curves that can spike sharply during liquidity scarcity or sudden borrow demand. Gyndore does not use utilization curves. Borrowing costs are adjusted through the Pareto Controller in predictable  $\pm 10$  basis point steps, each subject to a 24-hour challenge window, producing smoother and more transparent rate movement.

**Borrow Rate Efficiency:** In traditional money markets, suppliers must be compensated even when capital sits idle, which raises borrower costs and distorts pricing. Gyndore mints gynUSD on demand through CDPs, eliminating idle pool dynamics and routing borrower interest directly to active participants through an immutable revenue split.

**Risk Isolation:** In multi-asset systems, failures in one collateral market can cascade through shared liquidity, oracle dependencies, and systemic risk parameters. Gyndore isolates risk around a single collateral type, eliminating cross-asset contagion and simplifying risk management across the entire system.

**Optimized Parameters:** General platforms must balance risk settings across assets with widely varying volatility and liquidity characteristics. Gyndore optimizes exclusively for Bitcoin's mature market structure, deep liquidity, and reliable liquidation dynamics.

**Product Simplicity:** Supporting many assets demands complex interfaces, fragmented liquidity views, and asset-specific risk rules. Gyndore focuses on one collateral type and one borrowing flow, resulting in a simpler mental model and a cleaner interface: deposit cbBTC, mint gynUSD, and manage a single collateral ratio.

## Immutability as the Trust Moat

Gyndore's core protocol is immutable. Once GYND is active, whether through a post-launch fee switch or a day-one launch with the fee switch pre-activated, the protocol's fee structure is permanently fixed.

No governance can alter parameters beyond borrow rate direction, no multisig can modify system behavior, and no upgrade path exists that could introduce new risk. Governance is confined to a single lever with strict bounds, incremental step changes, and clear consensus requirements. The rules are set at deployment and cannot be rewritten by any party.

This is not just a philosophical commitment to decentralization. It is a practical advantage for institutional participants. Immutability turns the protocol from a moving target into stable infrastructure. Risk teams can model the system, stress-test assumptions, and approve integrations with confidence that core mechanics will not shift through upgrades, emergency interventions, or governance capture.

This reduces policy and upgrade risk and strengthens the ability to underwrite long-horizon exposure. Put simply, once Gyndore clears due diligence, it stays cleared.

There is no asset rehypothecation. Collateral deposited into Gyndore remains fully backing minted gynUSD at all times, and gynUSD holders can always redeem for the underlying cbBTC collateral through the protocol's redemption mechanism.

Gyndore's codebase will be fully open source, professionally audited, and publicly verifiable, allowing anyone to inspect the exact logic governing the system.

Combined with immutable contracts that eliminate upgrade and admin-intervention risk, Bitcoin collateral that offers familiar and deeply liquid backing, cbBTC that provides clear custody assumptions through Coinbase, and fully onchain activity that is transparent and auditable, Gyndore is built to meet the standards of institutions that demand verifiable security and predictable behavior.

## Why Base?

Base is Coinbase's Ethereum Layer 2 network, built to bring the scale and cost-efficiency of rollups to everyday onchain activity. Since launch, Base has grown from a new entrant into one of the most active and liquid L2 ecosystems, driven by Coinbase's distribution, seamless onramps, and strong developer momentum.

The result is a network with deep liquidity, high transaction throughput, and an expanding DeFi stack that makes it an ideal home for cbBTC-native borrowing and stablecoin infrastructure. Base provides the technical and economic foundation Gyndore needs to operate effectively, independent of any single distribution partner.

### Transaction Economics

Base's low fees make the protocol's mechanisms economically viable across a wide range of position sizes. In normal conditions, common transactions on Base often cost fractions of a cent to a few cents, depending on gas usage and network demand. As a result, liquidations remain economically attractive even for smaller positions, and gas costs are typically negligible relative to the liquidation bond, which is designed to keep liquidation execution reliably incentivized.

### Ecosystem Momentum

Base has established itself as a leading L2 by TVL and transaction volume. Building on Base positions gynUSD for immediate utility across established DEXs, lending platforms, and yield aggregators. The growing ecosystem provides natural venues for gynUSD liquidity and use cases beyond the Gyndore protocol itself. This existing infrastructure means gynUSD has day-one utility without requiring Gyndore to bootstrap an ecosystem independently.

### cbBTC Availability

cbBTC has emerged as the dominant wrapped Bitcoin on Base, providing the liquidity depth necessary for Gyndore's single-collateral model. By building exclusively on cbBTC rather than fragmenting across multiple wrapped variants, Gyndore optimizes for one collateral type's liquidity profile and oracle reliability. cbBTC's institutional-grade custody through Coinbase satisfies due diligence requirements that decentralized wrapped Bitcoin solutions cannot match. Institutions can point to Coinbase's compliance infrastructure, SOC 2 certifications, and public financial reporting.

## **Distribution Potential**

Base offers distribution advantages that strengthen the protocol's standalone viability. Backed by Coinbase and its 100M+ verified users globally, Base provides a direct pipeline to one of the largest crypto onramps in Western markets. Users can access Base through familiar interfaces with no bridge management, no new wallets, and minimal friction.

## Strategic Alignment Opportunities

Beyond Base's standalone benefits, Gyndore's design creates natural alignment opportunities with distribution partners and ecosystem participants.

### The DeFi Mullet

Coinbase has articulated a “DeFi mullet” strategy: centralized fintech interfaces in the front and decentralized protocol infrastructure in the back. Users interact with familiar, compliant, consumer-friendly applications while their transactions settle on permissionless rails. This architecture gives centralized entities stronger regulatory positioning while still capturing DeFi’s efficiency and composability.

Gyndore fits this model cleanly. A cbBTC holder can deposit collateral, mint gynUSD, and route that gynUSD into the Stability Pool to earn yield, without needing to understand the underlying mechanics. In effect, the user is arbitraging the protocol internally: they borrow against Bitcoin and earn yield funded by borrower interest and liquidation flows, within a self-contained system designed around cbBTC and gynUSD.

They maintain Bitcoin exposure without selling, and because the position is denominated in BTC collateral with a clear collateral ratio, they are not taking directional “sell my BTC” risk to earn yield. Price volatility does not liquidate them unless they choose an aggressive collateralization ratio, so they can target conservative buffers and treat the strategy as “BTC-backed yield while staying long BTC,” rather than rotating into external assets or taking additional third-party protocol risk.

### Distribution Partnership Economics

The GYND token gives strategic participants a direct way to align with protocol growth and long-term success.

First, it provides revenue participation. 30% of all borrower interest is distributed continuously in gynUSD to GYND stakers, meaning partners who drive borrowing activity can capture a share of the revenue they help generate.

Second, it provides borrow rate governance. GYND holders control the protocol's only adjustable parameter, the borrow rate, through the Pareto Controller. A meaningful GYND position allows participants to influence rate policy in a

constrained and predictable way, optimizing for user growth, peg stability, or supplier yield depending on market conditions.

Third, it enables ecosystem coordination. The 80% consensus threshold and 24-hour challenge window ensure that rate changes require broad agreement, reducing the likelihood of destabilizing shifts. Directional votes can be used to steer protocol behavior toward broader ecosystem objectives. This structure provides governance influence without introducing the risks typically associated with broad parameter control.

### **Coinbase Specific Alignment**

For Coinbase specifically, alignment with Gyndore is reinforced by cbBTC's role as sole collateral. Every CDP requires cbBTC, so Gyndore's growth directly drives cbBTC adoption. If Coinbase were to acquire GYND, they would capture protocol revenue, governance influence, and increased cbBTC demand simultaneously with multiple reinforcing incentives to promote Gyndore through their distribution channels.

Additionally, cbBTC's issuer has strong incentive to maintain reliable custody and peg integrity, because failures would impact the DeFi ecosystem built on top of their product. Gyndore's success reinforces cbBTC's importance within that ecosystem. The protocol doesn't depend on Coinbase participation; it functions fully on Base's existing infrastructure. But Gyndore's design makes such alignment economically rational, creating optionality for deeper integration if both parties find it valuable.

## End User Risk Considerations

Gyndore is designed to be predictable and trust-minimized, but it still carries inherent risks. Users face liquidation risk from cbBTC volatility, oracle risk from cbBTC/USD pricing, and system risk if the Stability Pool is insufficient and liquidations fall back to redistribution. Gyndore also inherits cbBTC-specific custody and regulatory risks linked to Coinbase infrastructure.

### Smart Contract & Oracle Risks

Smart contract risk is inherent to DeFi. Gyndore's immutable design means core contracts cannot be patched after deployment, so security must be achieved from day one through rigorous audits, testing, and conservative engineering.

Oracle reliability is equally critical. Gyndore uses Chainlink's cbBTC/USD price feeds as the primary oracle, with Redstone as a secondary fallback if the Chainlink feed becomes stale or unresponsive. This dual oracle approach ensures the protocol can continue operating reliably even if one provider experiences downtime.

### Market Risks

Liquidation risk affects all leveraged positions. Rapid cbBTC price declines could trigger liquidation before users can respond. Under Stability Pool liquidation, the user loses a 5% collateral penalty plus the liquidation bond, but retains any surplus collateral. Under redistribution, the user loses the liquidation bond and all remaining collateral, as the entire position is absorbed by other CDPs. Sharp market moves may not provide time for defensive action.

Higher collateralization ratios provide larger buffers but reduce capital efficiency. Interest rate volatility impacts borrowing costs. The Pareto Controller ensures gradual changes through the  $\pm 10$  bps step limit and 24-hour challenge windows. Rates range from 1% to 20% based on GYND holder votes and redemption override triggers.

### Base Layer 2 Risks

Operating on Base introduces L2-specific risks. Sequencer downtime prevents transaction submission, potentially causing users to miss liquidation opportunities or fail to add collateral during price declines. Forced transaction inclusion via L1 provides an escape hatch with some delay. Bridge infrastructure presents additional

considerations. A bridge hack or pause could affect cbBTC transferability between L1 and L2, potentially trapping collateral or preventing new deposits.

### **cbBTC Specific Risks**

Gyndore inherits all risks associated with Coinbase's custody and bridging infrastructure. A failure at Coinbase's custody layer would affect the backing of cbBTC in the system. Regulatory action forcing Coinbase to freeze Bitcoin reserves would have implications for cbBTC holders.

The protocol prices collateral via cbBTC/USD oracle feeds. If cbBTC trades at a discount to BTC, the oracle reflects this. Sustained cbBTC depegging would create systemic stress; a 5% discount would reduce a 110% collateralized position to 104.5% actual BTC backing.

### **Systemic Risks**

Extreme market events could overwhelm protection mechanisms. A flash crash dropping cbBTC 50% or more could trigger cascading liquidations faster than the Stability Pool can absorb.

Example: cbBTC drops 20% in minutes, triggering mass liquidations that drain the Stability Pool. The protocol transitions to redistribution, where liquidated positions are absorbed entirely by other CDPs at their original collateral ratio, leaving liquidated users with no surplus.

Some CDPs receiving redistributed debt fall below 110%, triggering a second wave. Safety Mode activates when the TCR falls below 150%, restricting leverage-increasing actions. Pure collateral withdrawals and pure debt increases are prohibited, while new CDPs and closures are only permitted if the resulting TCR remains at or above 150%.

Historical data from similar protocols provides context: maximum single-day liquidations reached approximately 10% of total supply during severe events. Tail-risk events can exceed historical precedent.

## **Regulatory Risks**

Although the regulatory environment is evolving quickly, with major jurisdictions advancing legislation and guidance that are improving clarity, stablecoin regulation remains unsettled. Future rules could affect protocol operations, integrations, or end-user access. Because Gyndore relies on cbBTC as collateral, it also inherits indirect exposure to regulatory or compliance actions affecting Coinbase or cbBTC's custody, issuance, or transferability.

*Ultimately, end-users are responsible for complying with applicable laws in their jurisdiction.*

## Conclusion

Gyndore is a return to fundamentals: a Bitcoin backed stablecoin protocol built on Base, designed around cbBTC liquidity and Base's growing distribution network.

Bitcoin holders can mint gynUSD against cbBTC to access liquidity or leverage, while also earning native Bitcoin backed yield by depositing gynUSD into the Stability Pool. By focusing exclusively on Bitcoin collateral through cbBTC, Gyndore concentrates risk around one of crypto's deepest and most liquid markets, enabling capital efficiency with a 110% minimum collateralization ratio and a cleaner, more predictable borrowing experience than multi asset money markets.

The protocol builds on proven CDP mechanics, combining minting, liquidations, and redemptions with a first loss Stability Pool and transferable CDP NFTs for flexible position management. gynUSD's peg is maintained through hard arbitrage boundaries, with redemptions acting as a floor and minting as a ceiling, reinforced by incentive feedback through borrow rates and Stability Pool yield.

Revenue is transparent and immutable. Borrower interest is distributed through a hardcoded 70/30 split between Stability Pool depositors and GYND stakers. Depending on market conditions, GYND can be activated either through a post-launch fee switch following a bootstrapping phase, or distributed at mainnet launch with the fee switch pre-activated from day one.

Governance is intentionally minimal, limited to borrow rate direction through the Pareto Controller with strict bounds and step changes, alongside deterministic safety rails such as Safety Mode and dual oracle fallback logic.

*Taken together, these design choices position Gyndore as foundational Bitcoin lending infrastructure on Base, bringing Bitcoin backed stability and yield to the ecosystem.*